

**FACILITATING IMPROVED RELIABILITY OF INTERNET GROUP  
MANAGEMENT PROTOCOL THROUGH THE USE OF ACKNOWLEDGE  
MESSAGES**

**ABSTRACT OF THE DISCLOSURE**

5 One embodiment of the disclosures made herein is a method for facilitating a  
multicast group switch via a single Internet Group Management Protocol message. In  
accordance with such method, an operation for receiving an Internet Group Management  
Protocol (IGMP) Membership Report message designating a request for altering a present  
membership status with respect to designated multicast information. The IGMP message is  
transmitted from a requesting system. An operation is performed for determining a  
membership action associated with the IGMP Membership Report message. In response to  
determining the membership action, an operation is performed for preparing a membership  
acknowledge message. The membership acknowledgment message designates a resulting  
membership status associated with the request for altering the present membership status. An  
operation is then performed for transmitting the membership acknowledge message for  
reception by the requesting system.